

CLAIMS

Amend the claims as follows.

1. (Previously Presented) An apparatus, comprising:

a point light source;

a photodetector;

a lens, positioned in the same side of said point light source and said photodetector, said lens configured to focus a light from said point light source onto a target area of an object through said lens, and further configured to focus a reflected light from said target area of said object onto said photodetector through said lens;

wherein said object comprises a test strip comprising a light-absorbing area configured to occur in response to a specific component of a tested solution contacting therewith and further configured to absorb said light emitting from said point light source; and

wherein said point light source is configured to radiate a light with a first wavelength and a light with a second wavelength, wherein said tested solution contained in said light-absorbing area of said test strip is configured to absorb said light with the first wavelength, wherein a sampling amount of said tested solution is determined in accordance with the reflectance of said light with the first wavelength from said light-absorbing area, wherein said light-absorbing area is configured to occur in response to said specific component of said tested solution and is further configured to absorb said light with the second wavelength, and wherein a content of said specific component is determined in accordance with the reflectance of said light with the second wavelength from said light-absorbing area.

2. (Previously Presented) The apparatus of claim 1, further comprising a holder configured to hold said point light source at a first end thereof and further configured to hold said photodetector at a second end thereof, opposite said first end.

3. (Previously Presented) The apparatus of claim 1, wherein said object is located at a focal position of said lens.

4. (Previously Presented) The apparatus of claim 1, wherein said point light source comprises a light emitting diode.

5. (Previously Presented) The apparatus of claim 1, wherein said photodetector is configured to generate a response current in response to said reflected light from said target area of said object.

6. (Previously Presented) The apparatus of claim 5, wherein said photodetector comprises one or more of the following: a photodiode, a charge-coupled device, a complex metal oxide semiconductor sensor, or combinations thereof.

7. (Cancelled)

8. (Cancelled)

9. (Previously Presented) The apparatus of claim 1, wherein said specific component of said tested solution to be detected by the photodetector depends on an enzyme system contained in said test strip.

10. (Previously Presented) The apparatus of claim 9, further comprising means for monitoring a concentration of glucose in a blood sample.

11. (Previously Presented) The apparatus of claim 9, further comprising means for monitoring a concentration of cholesterol in a blood sample.

12. (Previously Presented) An apparatus, comprising:
a holder;
a point light source disposed at a first edge of said holder;
a photodetector disposed at a second edge of said holder opposite said first edge, said first edge and said second edge formed on the same side of said holder; and

a lens disposed at the same side of said point light source and said photodetector, said lens configured to focus a light from said point light source through said lens onto a target area of an object placed at a focal position of said lens, and further configured to focus a reflected light from said target area of said object onto said photodetector through said lens.

13. (Previously Presented) The apparatus of claim 12, wherein:

said point light source radiates a light with a first wavelength and a second wavelength at a tested solution in the target area of the object; and

the photodetector determines a sampling amount of said tested solution on the object in accordance with a reflectance of said reflected light with the first wavelength and determines a content of a component in said tested solution in accordance with a reflectance of said reflected light with the second wavelength.

14. (Previously Presented) The apparatus of claim 12, wherein said photodetector is configured to generate a response current in response to said reflected light from said target area of said object.

15. (Previously Presented) The apparatus of claim 14, wherein said photodetector comprises one or more of the following: a photodiode, a charge-coupled device, a complex metal oxide semiconductor sensor, or combinations thereof.

16. (Previously Presented) The apparatus of claim 12, wherein said object comprises a test strip comprising a light-absorbing area configured to occur in response to a specific component of a tested solution contacting therewith, and further configured to absorb said light emitting from said point light source.

17.-30. (Cancelled)

31. (Previously Presented) A method, comprising:

emitting a light onto a target area of an object via a light source located at a first end of a holder;

detecting a reflected light from said target area of said object via a photodetector located at a second end of said holder, opposite said first end;

focusing said light onto said target area of said object via a lens;

focusing said reflected light onto said photodetector via said lens;

radiating the light with a first wavelength and a second wavelength via said point light source onto a tested solution on said object;

detecting an amount of absorbsion of said light with the first wavelength via said tested solution contained on said object; and

detecting an amount of absorbsion of said light with the second wavelength via said tested solution contained on said object.

32. (Previously Presented) The method of claim 31, further comprising locating said object at a focal position of said lens.

33. (Previously Presented) The method of claim 31, further comprising using a light emitting diode to emit the light onto said target area of said object.

34. (Previously Presented) The method of claim 31, further comprising generating a response current in response to said reflected light via said photodetector.

35. (Previously Presented) The method of claim 34, further comprising using one or more of a photodiode, a charge-coupled device, a complex metal oxide semiconductor sensor, or combinations thereof to detect the reflected light from said target area of said object.

36. (Previously Presented) The method of claim 31, wherein said target area of said object comprises a light-absorbing area with a specific component of a tested solution capable of absorbing said light from said light source.

37. (Previously Presented) A method, comprising:
emitting a point of light onto a target area of an object via a point light source located at a first end of a holder;

detecting a reflected light from said target area of said object via a photodetector located at a second end of said holder, opposite said first end;

focusing said point of light onto said target area of said object via a lens positioned to the same side of said point light source and said photodetector;

focusing said reflected light onto said photodetector via said lens;

producing a light-absorbing area on said object in response to a specific component of a tested solution contacting therewith, wherein said light-absorbing area is configured to absorb said light emitting from said point light source;

radiating the point of light with a first wavelength and a second wavelength via said point light source, absorbing said point of light with the first wavelength via said tested solution contained in said light-absorbing area, and absorbing said point of light with the second wavelength via said tested solution.

38. (Previously Presented) The method of claim 36, wherein said specific component of said tested solution depends on an enzyme system contained in said object.

39. (Previously Presented) The method of claim 38, further comprising monitoring a concentration of glucose in a blood sample.

40. (Previously Presented) The method of claim 38, further comprising monitoring a concentration of cholesterol in a blood sample.

41. (Previously Presented) The method of claim 31, further comprising:
determining a sampling amount of said tested solution in accordance with a reflectance of said reflected light with the first wavelength from said target area, and
determining a content of a component in said tested solution in accordance with a reflectance of said reflected light with the second wavelength from said target area.

42.-45. (Cancelled)